

# National **Charter School** **Resource** Center

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at LEARNING POINT ASSOCIATES

## **Educational Facilities Planning**

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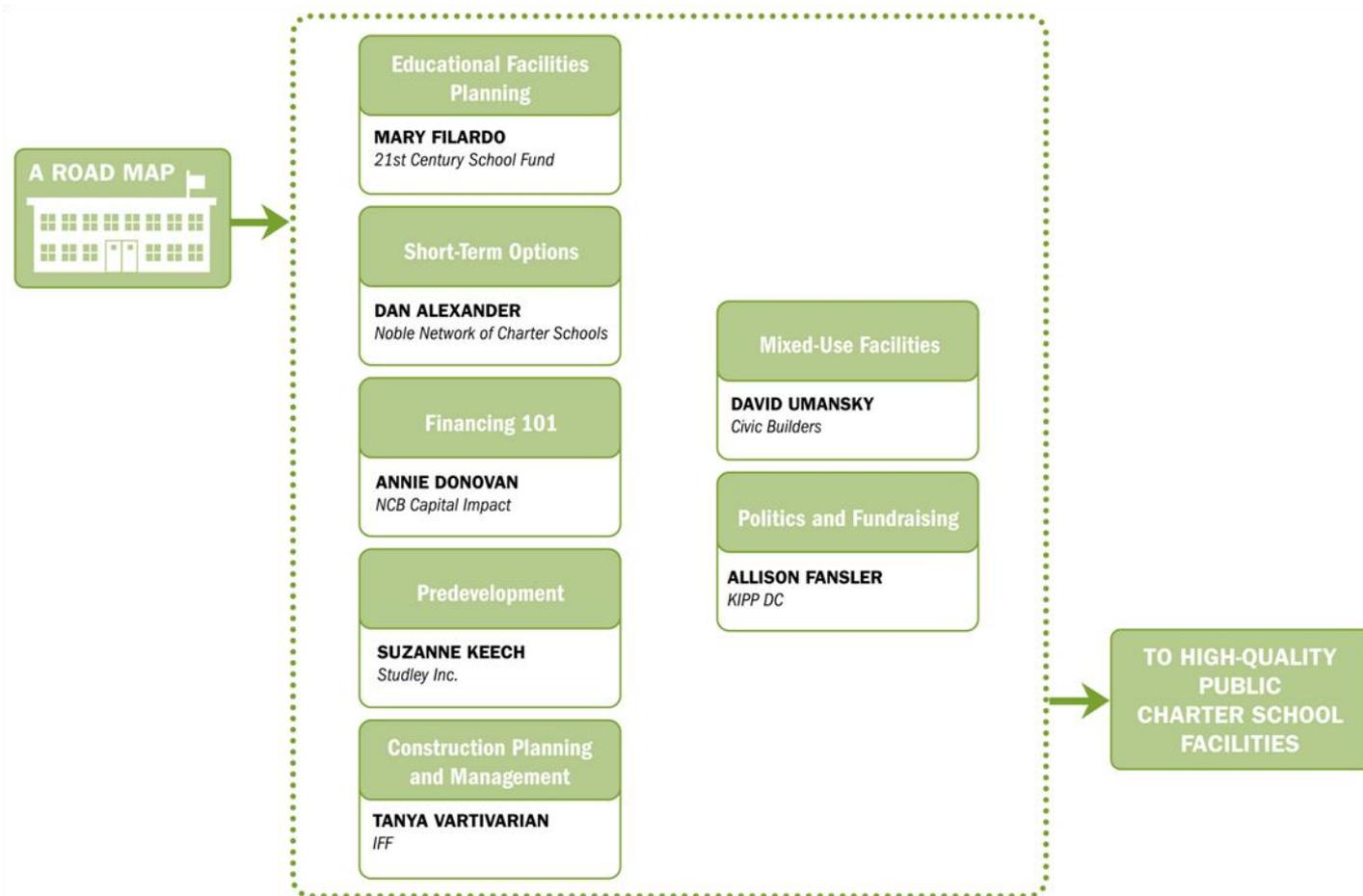
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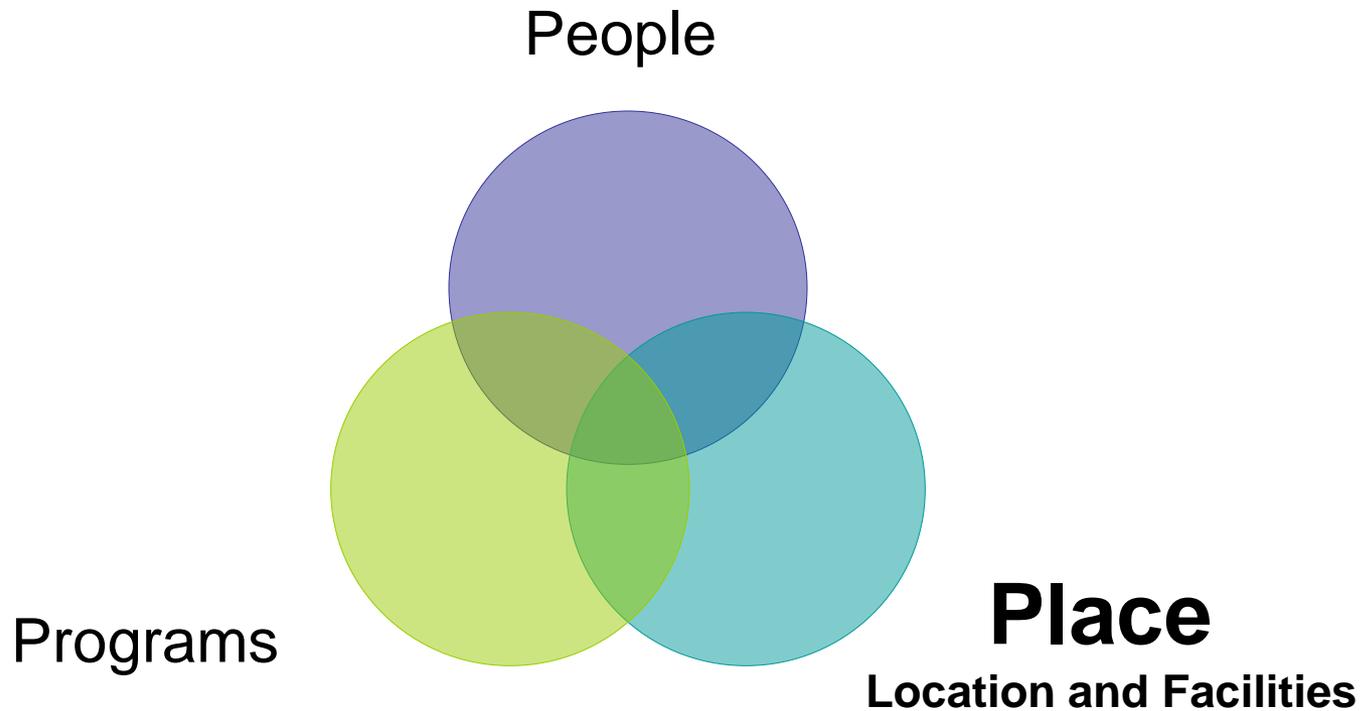


# Facilities Process Overview



# Why Plan?

Charter Schools are responsible for...



# Educational Facilities Planning Will...

- Secure the benefits of a high-quality facility.
- Ensure timely management of enrollment growth or change.
- Provide for cost-effective facility spending.
- Enable access to real estate and facility funding opportunities.

# Is it Really Worth it?



## Research Studies Indicate:

- Teachers are more likely to stay in schools with a high-quality facility.
- Better facilities correlate to improved student attendance, reduced suspension and dropout rates, and fewer behavioral incidents.

*Source: 21st Century School Fund (2009)*

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# Research Studies Indicate...

- Students in high-quality facilities outperform their peers in low-quality facilities by 3%–7% on standardized tests.

*Source: 21st Century School Fund (2009)*

# Building Condition Matters

- **Healthy indoor air quality (IAQ)** supports better respiration and does not trigger asthma or allergies in students and staff; occupants are more alert.
- **Thermal comfort** enables occupants to focus on work and avoid utilizing energy to keep warm or cool.

# Building Design Matters

- **Adequate day lighting** helps occupants with focus and energy.
- **Good acoustics** help students and teachers hear and be heard effectively, increasing levels of comprehension.
- **Specialty design** aligns space to instruction and content and supports a rich curriculum.

# Julia Richman Education Complex

The six schools in the Julia Richman Education Complex share a ceramics teacher, seen here with a class in our state-of-the-art ceramics studio.

Elementary, middle, and high school students learn the skills of pottery surrounded by all of the equipment and tools they need to create their works of art. *Cathy, Student*



# Building Utilization Matters

- **Appropriately sized and utilized** school buildings contribute to a healthy school climate for teachers, staff, and students.
- **Community use** of public school facilities brings public support for schools and improves neighborhoods.

# Community Learning Center Tech Academy

Our building was fashioned from an old lumber and hardware store that had been vacant for several years.

Classrooms were created, offices and foyers incorporated, and the beauty is truly evident.

The curves, the lines, the clean open feel resonates throughout, making everyone feel welcome and comfortable with enough hint of business/education to keep students engaged.

*Jerome, Student*



# High-Quality Space is Intentional: Planning Gets You There



# Facilities Planning Process

- Step 1: Build an in-house facility planning team.
- Step 2: Assess facility problems and capacity.
- Step 3: Establish a vision for the facility.
- Step 4: Bring in planning and design consultants.
- Step 5: Develop educational specifications.
- Step 6: Evaluate your capacity to implement the plan.

# Step 1: Build In-House Facility Team

- Find the leader.
- Ensure broad participation.
- Create a review and approval process.

# Step 2: Assess Challenges and Assets

## ➤ Challenges

- Program
- Staffing
- Enrollment
- Funding
- **Facility**

## ➤ Assets

- Program
- People
- Community
- Funding
- **Facility**

## Step 3: Articulate Your Vision

- What are your aspirations for your school?
  - Educational program
  - People: community, students and staff
  - Place: location and facility
    - What size?
    - What character and feel?
    - What condition?

# Recap

- You have a facility lead and team.
- You understand your challenges and assets.
- You know where you want to end up.

# Thurgood Marshall Academy Public Charter High School



# Savoy/Thurgood Marshall Academy Sports and Learning Center



## Step 4: Engage an Educational Facilities Planner

- Establish a time and resources budget.
  - Create a schedule based on your assessment.
  - Determine how much you will do with your in-house team.
  - Prepare a scope of work for your educational facility plan.
  - Interview individuals and firms.
  - Engage planner or designer to do planning.
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# Step 5: Determine Educational Specifications

- Create a text document that will be used by real estate and building professionals to find and develop the educational spaces you need at a cost you can afford.

# Define Amount of Space Needed

- Determine current and planned enrollment
- Determine current and planned staffing
- Identify specific program as well as administrative and operational spaces and sizes.

# Space Planning Template

1 SAVOY ELEMENTARY SCHOOL		PROGRAM SUMMARY - SCHEME 1/SCHEME 2						
3		Master Plan			Scheme 1		Scheme 2	
4 Space Category	Existing Net Area	Proposed Net Area	Net Change	Proposed Net Area	Net Change	Proposed Net Area	Net Change	
5 Academic Core	25,847	21,850	-3,997	24,918	-929	24,918	-929	
6 Media Center	1,191	2,520	1,329	2,520	1,329	2,520	1,329	
7 Visual Arts	695	1,325	630	1,000	305	1,000	305	
8 Music	695	1,050	355	1,050	355	1,050	355	
9 Administrative	2,146	1,955	-191	3,285	1,139	3,285	1,139	
10 Student Dining & Food Services	6,436	4,950	-1,539	4,240	-2,196	4,240	-2,196	
11 Multi-Purpose Shared Activity Areas	1,533							
12 Engineering & Custodial Services	1,797	600	-1,197	600	-1,197	600	-1,197	
13 Building Services	4,230	5,304	1,074	3,473	-757	3,473	-757	
14 Existing Elementary School Facility	44,570 nsf	39,554 nsf		41,086 nsf		41,086 nsf		
15 Net-to-Gross Multiplier:	1.38							
16 Existing Gross Floor Area	61,578 gsf	54,648 gsf		56,764 gsf		56,764 gsf		
18 JOINT USE FACILITY								
19 PHYSICAL EDUCATION - RECREATION - FITNESS - ATHLETICS (SAVOY, TMA & DPR)								
20		Master Plan		Scheme 1		Scheme 2		
21 Room Name	Existing Net Area	Proposed Net Area	Net Change	Proposed Net Area	Net Change	Proposed Net Area	Net Change	
22 Physical Education	-	14,500	14,500	13,754	13,754	16,230	16,230	
23 Multi-Purpose Shared Activity Areas	1,533	2,250	3,120	3,120	1,587	2,945	1,412	
24 Proposed Addition (nsf)		16,750	17,620	16,874	15,341	19,175	17,642	
25 Proposed Gross Area (Net x 1.38)		24,316		21,171		24,346		
26								
27 TOTAL PROPOSED GSF:		78,963 gsf		77,935 gsf		81,110 gsf		
28 Parking				41 Surface		36 Underground		
29								

Source: Savoy Educational Specifications; October 2006, 21st Century School Fund.

# Define Individual Space Requirements

➤ With planner and/or architect, define specific requirements for each space:

- Adjacencies
- Furniture
- Fixtures
- Storage
- Technology
- Daylighting
- Finishes

# Individual Space Specifications

12				
13				
14	<b>Savoy Elementary School - Additions and Renovations</b>			
15	Detailed Program Data Sheet			
16				
17	<b>Space Description:</b>		<b>Movable:</b>	Work tables and stools
18	<i>Space Category:</i>	Core Academic		Teacher Demonstration Table
19	<i>Room:</i>	Science Center: May be adjacent to Green Roof Area		Teacher wardrobe unit - lockable
20	<i>Users:</i>	up to 25 students and 3 staff members per room		Teacher desk w/ chair, 4 drawer file cabinet
21	<i>Size SF:</i>	1,400 nsf		Metal cabinets for storage
22	<b>Finishes:</b>			
23	<i>Floor:</i>	VCT	<b>Mechanical:</b>	
24	<i>Wall:</i>	Painted GWB, existing painted CMU	<i>HVAC:</i>	No special req.
25	<i>Ceiling:</i>	ACP	<i>Plumbing:</i>	Deep art type sinks and 1 regular sink with bubbler
26	<i>Door:</i>	Flush door w/ vision panel		
27	<i>Window:</i>	Metal frame	<b>Electrical/Technology:</b>	
28	<i>Casework:</i>	Large sink in base cabinet	<i>Light Level:</i>	50 footcandles
29		Teacher wardrobe unit - lockable	<i>Fixtures:</i>	Recessed fluorescent fixtures
30		Wall and Base cabinets	<i>Power:</i>	4 double outlets evenly distributed
31		Plastic laminate shelving - deep	<i>Telephone:</i>	Intercom jack connection
32	<i>Sound Isolation:</i>	STC-37	<i>TV:</i>	Cable/MATV port at TV bracket
33	<b>Equipment:</b>		<i>Computer:</i>	Network outlet at computer locations
34	<i>Fixed:</i>	Dry erase board w/ map rails	<i>No of Computers:</i>	4 workstations
35		Bracket for ceiling mounted tv		1 printstation
36		Bracket for ceiling mounted projector		
37		Tackboards		
38		Projection screen		
39		Soap dispenser at sink		
40		Paper towel dispenser at sink - large roll		
41				
Ready				

## Step 6: Determine Feasibility

- Use estimate of space requirements from educational specifications (Ed Spec).
    - Estimate cost of lease or improvements:
      - Total gross square feet X lease per square foot or building improvements per square foot
  - Identify current funds available for occupancy costs.
  - Evaluate the gap between estimated cost and funds available.
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# Feasibility Sample

	Year 1	Year 2	Year 3	Year 4	Year 5
Enrollment	100	125	150	200	275
Sq Ft per Student	150	150	150	135	135
Total Sq Ft	15,000	18,750	22,500	27,000	37,125
Lease \$ per Sq Ft	\$15	\$15	\$18	\$18	\$20
Total Lease Cost	\$225K	\$281K	\$405K	\$486K	\$743K
Annual Lease \$/Student	\$2,250	\$2,250	\$2,700	\$2,430	\$2,700

# Educational Facilities Planning: Key Take-Aways

- Planning is critical.
    - Poor facility planning will cost you financially and educationally. If you start out “wrong,” it is expensive to recover.
    - It is a board and staff leadership responsibility.
    - It takes time; start early
  - Process:
    - Build the team carefully; team members are as important as results.
    - Define decision-making processes early.
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# Q & A

# The Payoff

- High-quality educational facility planning gets you a better school, not just a better building.
- It ensures that your dollars and time are spent where they will have the greatest educational payoff.

# Reference

21st Century School Fund. (2009). *Research on the impact of school facilities on students and teachers: A summary of studies published since 2000*. Washington, DC: Author. Retrieved May 26, 2010, from: <http://www.21csf.org/csf-home/Documents/ResearchImpactSchoolFacilitiesFeb2010.pdf>

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